

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP 2004/010058

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> G02B6/00, G02B6/18

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G02B6/00-6/54

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2004, Japanese Registered Utility Model Gazette 1994-2004, Japanese Gazette Containing the Utility Model 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DIALOG(WPI, INSPEC), JOIS(JICST files)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	EL-BAKARY, M.A. Determination of Refractive Index Profile of Partially and Highly Oriented Fibers Using Double Refracting Interference Microscopy. Journal of Applied Polymer Science, 1 April 2003, Vol.87, No.14, p.2341-2347	1, 2, 4, 5 3, 6
Y A	JP 2002-116327 A (KURARAY CO., LTD.) 2002.04.19, paragraphs [0003], [0011] & US 2002/41044 A1 & EP 1197769 A1	1, 2, 4, 5 3, 6
Y	HUIJTS, R.A. et al. The relation between molecular orientation and birefringence in PET and PEN fibres. Polymer, 1994, Vol.35, No.14, p.3119-3121	5
Y	JP 2001-519857 A (NORTH CAROLINA STATE UNIVERSITY) 2001.10.23, page 15, lines 19-21, figure 4 & WO 1997/42361 A1 & US 5733653 A & EP 912778 A	5



Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 07.10.2004	Date of mailing of the international search report 26.10.2004
Name and mailing address of the ISA/JP Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer YOSHINORI TAKA Telephone No. +81-3-3581-1101 Ext. 3253
	2K 9813

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2001/20376 A1 (MITSUBISHI RAYON CO., LTD.) 2001.03.22, page 8, line 6 - page 9, line 23 & EP 1219982 A1 & AU 6873600 A	5
A	JP 11-337745 A (SUMITOMO WIRING SYSTEMS LTD.) 1999.12.10, paragraphs [0041] - [0050], [0067] - [0069], figures 2, 4 (Family:none)	1-6
A	JP 8-201637 A (NIPPON PETROCHEMICALS CO., LTD.) 1996.08.09, paragraphs [0040] - [0041], figures 1, 4 (Family:none)	1-6
A	JP 63-33705 A (MITSUBISHI RAYON CO., LTD.) 1988.02.13 (Family:none)	1-6
A	DUGAS, J. Birefringence and internal stress in polystyrene optical fibers. Applied Optics, 1 June 1994, Vol.33, No.16, p.3545-3548	1-6
E, A	JP 2004-212711 A (FUJI PHOTO FILM CO., LTD.) 2004.07.29 (Family:none)	1-6